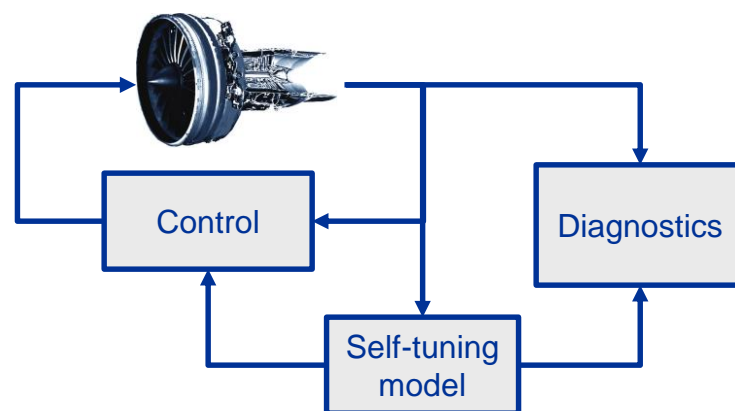


Health Management, Model-Based Control, and Run-Time Assurance - Session Overview



Donald L. Simon
NASA Glenn Research Center

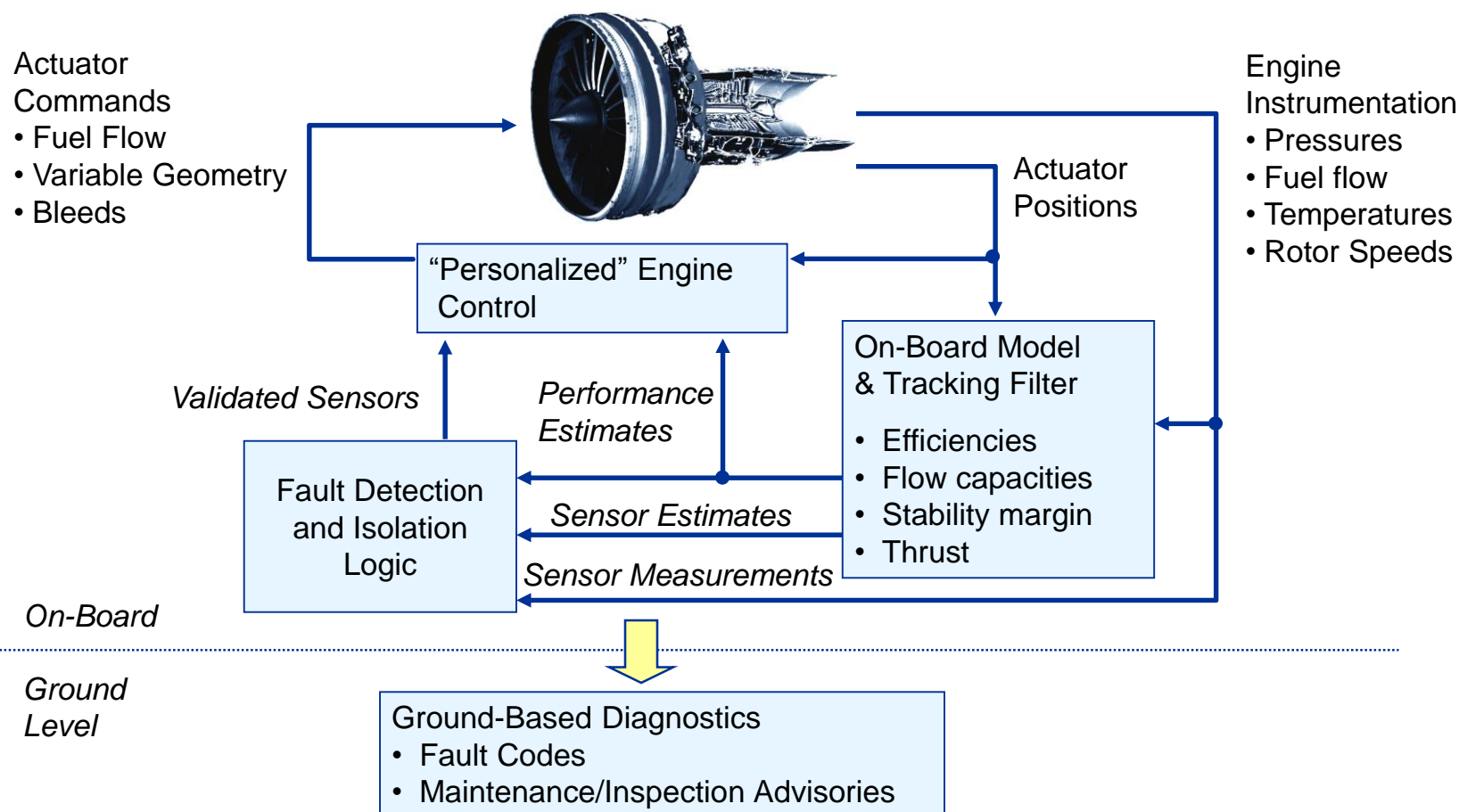
5th NASA Glenn Propulsion Control and Diagnostics Research Workshop
September 16-17, 2015
Cleveland, OH



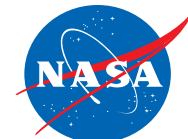
Health Management, Model-Based Control, and Run-Time Assurance

<u>Time</u>	<u>Presentation Title</u>	<u>Presenter</u>
1:00	Health Management, Model-Based Control, and Run-Time Assurance Session Overview	Don Simon (NASA)
1:05	Vehicle Integrated Propulsion Research (VIPR) Gas Path Diagnostics and Volcanic Ash Ingestion Test Results	Don Simon (NASA)
1:35	Sensor Selection for Engine Performance Estimation and Gas Path Fault Diagnostics	Aidan Rinehart (Vantage Partners)
2:00	Model-Based Engine Control: Potential Impacts on Engine Design	Joe Connolly (NASA)
2:30	Run-Time Assurance of Advanced Propulsion Algorithms	Edmond Wong (NASA)

Model-Based Control and Diagnostics



- **Real-time performance estimation**
- **Enhanced gas path diagnostics**
- **Performance enhancing engine control**



Health Management, Model-Based Control, and Run-Time Assurance

*(Additional Related Activities Included in PCD
Workshop Reception Poster Session)*

**Information Fusion for
Enhanced Aircraft Engine
Health Management (NRA)**

Pratt & Whitney



**Propulsion Integrated
Fusion Framework
(PIFF) (NRA)**

Honeywell



Health Management, Model-Based Control, and Run-Time Assurance

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